

REMARKS

This Amendment is responsive to the Office Action of the Examiner mailed April 9, 2003.

Claim Objections

Claims 1-20 and 25-27 have been amended in the preamble to a method format.

Claim Rejections -- 35 USC 112, Second Paragraph

Claims 14-17 have been amended to claim the method of using X-ray radiation, synchrotron radiation, an electronic microprobe instrument and, visible, ultraviolet or infrared light, set forth in a method format. The amendments include specific steps and not intended use.

Minor amendments to the dependent claims from claim 1 have been made. In claim 2 the word "the" has been inserted before the term "soft plate." In claim 7, the wording "on the two plates" has been added at the end of the claim. In claim 12, the term "vacant" has been added before the term "impression." In claim 18, it is made clear that light originates "to the vacant impression" from the optical fibers.

Claim 21 has been amended to include an optical connector "having a surface for reflective radiation transmission." Similar amendments have been made to claims 22 and 23, with claim 23 setting forth connection of two optical fibers. Claims 22, 23, and 24 are all limited to the "vacant" impressions.

Claim Rejections -- 35 USC 102 and 35 USC 103

Claims 1, 4 and 21-24 have been rejected under 35 USC 102 (b) as being anticipated by Taylor US Patent 4,109,369.

Claims 17-19 have been rejected under 35 USC 103 (a) as obvious over Taylor '369.

Claims 1, 5 and 20 have been rejected under 35 USC 103 (a) as obvious over Taylor '369 in view of Faustmann et al. (DE 3940777).

Claims 2, 3, 6-13 and 25-27 have been indicated allowable.

Claim 1 has been amended to set forth the fact that the impression is vacant and that the impression provides for reflective radiation transmission along the axis of the vacant impression. Faustmann et al. (German DE 39 40 777 A1) and Taylor '369 are optical fiber connectors where the optical fibers themselves provide the reflective surface for the optical transmission radiation. The impressions defined by Faustmann et al. and Taylor '369 are not vacant; they are occupied by optical fibers.

In claim 1 as modified, it is made clear that it is the vacant impression that provides for the reflective transmission of radiation. In other words, the vacant impression is itself an optical device which provides for the reflective transmission of radiation.

This is to be contrasted from optical fibers where the walls of the optical fibers provide the reflection. In applicant's disclosure, it is the impression that provides the reflective surface for radiation transmission.

In this regard, attention is directed to Fig. 8 and the corresponding description. It is plainly seen that optical fibers F abuts ellipsoidal pressed monocapillary optics C. The impressions are vacant. Light is transmitted by emission from the optical fibers into the vacant impression, and reflects from the walls of the impressions to traverse the length of the connector. Finally, the optical connector channels all of the light to the remaining abutted optical fiber.

Claim 21 is limited to the optical connector where the vacant impression causes light to be transmitted between the ends of the impression. Claim 22 covers the process of the apparatus of claim 21. Claim 21 and 22 differ from the cited prior art

connectors because the fibers fill the connector (or impression) and the fiber walls form the reflective surface.

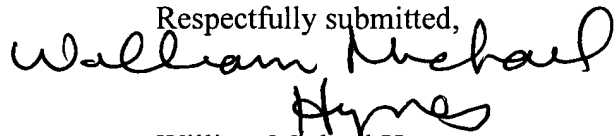
Over the references cited, applicant stresses that he discloses optical surfaces formed by impressions. Each of these impressions is a vacant impressions which defines exterior surfaces for transmitting light by reflection. Accordingly, it is submitted that the claims as modified are both novel and non-obvious over the prior art where utilizing vacant impressions as optical elements is neither suggested nor disclosed.

CONCLUSION

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 415-576-0200.

Respectfully submitted,



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